

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 11. (Canceled)

12. (New) An image sensing apparatus comprising:

a plurality of pixels arrayed in a horizontal and a vertical direction;

a storage unit configured to store a plurality of one-dimensional correction data in accordance with a plurality of image sensitivity settings;

a setting unit configured to set image sensitivity;

a calculating unit configured to generate two-dimensional correction data by expanding the one-dimensional correction data stored in the storage unit;

a correction unit configured to correct image data outputted from the plurality of pixels by using the two-dimensional correction data generated by the calculating unit; and

a control unit configured to read the one-dimensional correction data from the storage unit in accordance with the image sensitivity set by the setting unit, and control the calculating unit so as to generate the two-dimensional correction data by expanding the read one-dimensional correction data.

13. (New) A control method for an image sensing apparatus which comprises a plurality of pixels arrayed in a horizontal and a vertical direction, a storage unit configured to store a plurality of one-dimensional correction data in accordance with a plurality of image sensitivity settings, and a setting unit configured to set image sensitivity, the method comprising:

reading the one-dimensional correction data from the storage unit in accordance with the image sensitivity set by the setting unit;

generating two-dimensional correction data by expanding the read one-dimensional correction data;

correcting image data outputted from the plurality of pixels by using the generated two-dimensional correction data.